

MEMORANDUM

TO: Steering Committee, Strategic Initiative for Economic Growth

FROM: *Market Street Services*

DATE: October 12, 2010

RE: Draft recommendations – *Target Cluster Analysis*

A thorough review of Missouri's economic and occupational trends, training capacity and supportive research, infrastructure and policies led to the identification of priority target sectors for Missouri to pursue in the coming years. After your Committee reviews this Memo and discusses the proposed targets at length at your October 20 meeting, *Market Street* will develop a full *Target Cluster Analysis* for delivery to the Missouri Department of Economic Development (DED) and this Committee in November.

Structure of the *Target Cluster Analysis* report

In addition to its existing employment capacity, Missouri's competitive advantage with respect to its talent base and quality of place factors support the development and continued growth of its target sectors. Thus, the full *Target Cluster Analysis* will present three different, but necessary, perspectives on the justifications, challenges, and opportunities for each target. In addition to providing a target overview inclusive of the definition, industry dynamics, trends, and projections, each target cluster will be discussed in terms of People, Prosperity, and Place.

- The **People** section will present an occupational analysis of the state's workforce development and support capacity needed to grow the target, highlighting regional strengths and challenges.
- The **Prosperity** section will analyze business sector dynamics including historical and projected growth trends, wages, and location quotient calculations for key sub-sectors at the state and regional levels.
- Lastly, the **Place** section will present an objective review of various aspects of the state's geography, infrastructure, institutional and research capacity, and public policy that affect successful target growth.

Recommendations related to growing the state identified targets will be included in the tactical plans of the *Strategic Initiative for Economic Growth*.

Methodology

Market Street began the review process with a look at the performance of the state's existing targets to assess their continued viability. We also examined data trends in every four-digit NAICS code in addition to MERIC occupational data and projections to identify trends not captured by the existing target sectors.

Above all, *Market Street's* recommendations are derived from a **holistic view** of the sectors and networks within each target. Relevant support services, educational opportunities, research activity, recent developments, infrastructure, success with current targets, and stakeholder input are just a few of the considerations that complement the quantitative analysis and are taken into account when developing recommendations.

Thus, the recommendation of a target sector does not imply that this cluster will be grown solely by attraction of outside firms. Rather, certain targets and niches will benefit more from a focus on retaining and expanding existing employment. This is especially true for certain Advanced Manufacturing and basic manufacturing sub-sectors that face critical competitive challenges both at home and abroad.

This memo provides only a **brief snapshot** of the target clusters to inform Steering Committee discussions on October 20. Additional data and analysis will be provided in the final *Target Cluster Analysis*.

Existing Targets (2007)

Targets currently being pursued by DED and the Missouri Partnership are:

- Agribusiness
- Automotive
- Defense/Homeland Security
- Energy
- Finance
- Information Technology
- Life Sciences
- Transportation/Logistics

Feedback received in the first round of regional meetings suggests that stakeholders feel there are too many targets which are too broad or vague. The *Market Street* team concurs. In the state's existing target definitions, there was an excessive number of subsectors, many of which did not have a clear relationship to their applied targets or were misapplied. Targeting at the state level must be pursued in a way that supports multiple, varied regional economies but is still focused enough so that effective marketing and programs can be delivered.

Recommended Targets (2010)

After analyzing the State of Missouri's occupational dynamics, employment and wage growth between the fourth quarters of 2004 and 2009, reviewing the performance of the 2007 targets, and considering other factors like institutional capacity and infrastructure, *Market Street* recommends the several revisions to the 2007 targets. These recommendations do not reflect a complete overhaul of current economic development targeting efforts, as the DED has had strong success in many of these areas. Rather than a "revolution" in replacing all the existing targets, they are an "evolution" of the more specific targets. The state's proposed target sectors are:

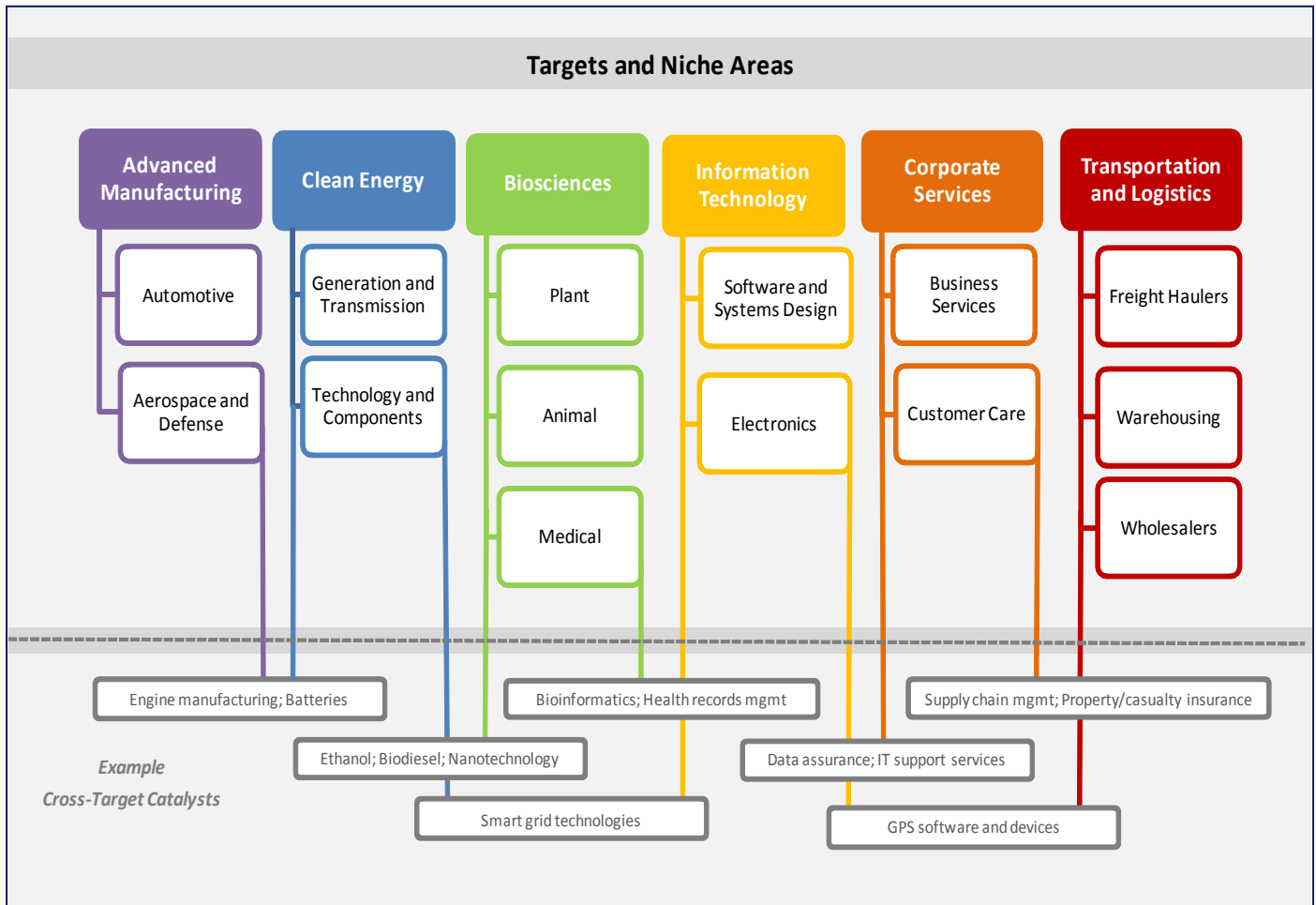
- **Target Cluster: Advanced Manufacturing**
 - Niche: Automotive
 - Niche: Aerospace and Defense
- **Target Cluster: Clean Energy**
 - Niche: Generation and Transmission
 - Niche: Technology and Components
- **Target Cluster: Biosciences**
 - Niche: Plant
 - Niche: Animal
 - Niche: Medical
- **Target Cluster: Information Technology**
 - Niche: Software and Systems Design
 - Niche: Electronics
- **Target Cluster: Corporate Services**
 - Niche: Business Services
 - Niche: Customer Care
- **Target Cluster: Transportation and Logistics**
 - Niche: Freight Haulers
 - Niche: Warehousing
 - Niche: Wholesalers

These revised targets reflect a broader base of economic activity, with specific “**niches**” at their core. When appropriate, the more broadly-defined targets capture a range of sub-sectors that may indirectly benefit from strategies focused on the “niches” within each target. “Niches” reflect high-value opportunities for state economic growth based on competitive strengths in a combination of existing employment, research capacity, infrastructure, occupational skills, and/or training resources. Effective development of these sub-sector niches leads to possibilities for growth of larger target groupings of affiliated companies and employment.

The report will also provide a brief overview of **cross-target “catalysts”** or business sectors that if recruited, expanded, or developed could provide entryways into multiple target areas. For example, a bioinformatics firm could provide valuable recruitment leads for both the Biosciences and Information Technology targets. Similarly, a worker trained in bioinformatics has the skills to find employment within firms central to both target clusters. These potential catalyst areas are, of course, broader than represented in the following graphic; however, the graphic provides some ideas of how economic development can be approached in some instances to benefit multiple targets.

Effectively capitalizing on the region’s target opportunities will require local economic development organizations and departments, governments and training institutions to partner in dynamic ways to ensure that sectors are pursued through multi-faceted and holistic programs.

This entails a focus on multiple strategies including existing business retention and expansion, small business development, and recruitment/attraction. It should also be noted that target development does not necessitate the exclusion of growth opportunities in non-targeted sectors. These opportunities will be pursued as they arise but proactive economic development investments will focus on those clusters and niches with the highest probability for growth and wealth-creation.



The remainder of this memo will present information on each recommended target cluster. While the included tables present employment data by NAICS code, two things should be noted.

1. As previously discussed, information related to geographic advantages, occupational dynamics, research capacity, and other factors will be expanded upon in the full report after confirmation of the proposed targets by Committee members.
2. Some NAICS codes can be applied to multiple target areas and, of course, some economic activity related to target cluster development is not contained within employment and wage data. For these reasons, NAICS should not – and did not – exclusively define these recommended targets.

Advanced Manufacturing

- The proposed Advanced Manufacturing target incorporates two current Missouri target sectors, Automotive and Aerospace and Defense, as niches. This enables state economic developers to pursue policies that advance the prospects of Advanced Manufacturing as a category while also drilling down to capitalize on opportunities in these two long-standing state industry strengths. It should be noted that many suppliers of these two niches comprise a large share of the state's overall Advanced Manufacturing employment.
 - The *Automotive* niche includes the manufacture of vehicles, such as light trucks, utility vehicles, and truck trailers, and vehicle parts, such as storage batteries, carburetors, and current-carrying wiring devices.
 - The *Aerospace and Defense* niche includes the production, assembly, operations, maintenance, and modification of aerospace and national defense-related products and services, as well as businesses that supply this sector.
- While auto manufacturing employment has declined in recent years, Missouri has an established base that should be a focus of BRE efforts and that can be leveraged for emerging sectors that require specialized manufacturing and engineering skills. Additionally, innovation in automotive technologies provides new opportunities in energy-efficient vehicles and propulsion systems.
 - In July 2010, Governor Jay Nixon signed House Bill 2, which supports the state's automotive industry and jobs. The Missouri Automotive Manufacturing Jobs Act allows qualified manufacturing facilities and suppliers that bring next-generation production lines to the state to retain withholding taxes. This legislation will provide a competitive asset in the development of this niche.
- Missouri's major auto manufacturers include Ford Motor Company and Chrysler Group LLC.
- Missouri's Aerospace and Defense niche is supported by companies such as Boeing, an aerospace company; two military bases, Fort Leonard Wood and Whiteman Air Force Base; and Honeywell, an advanced defense manufacturing firm.

- Boeing's Hazelwood-based defense business recently landed a \$5.3 billion contract with the U.S. Navy to build more than 124 fighter jets over the next four years. This will ensure that Aerospace and Defense will have a solid base of Missouri employment during the implementation cycle of the *Strategic Initiative for Economic Growth*.
- In the tactical plans of the *Strategic Initiative*, actions will be included that focus on growth of manufacturing companies – both advanced and traditional – that were not selected as priority Advanced Manufacturing niches.
 - These categories employ thousands of Missourians and will remain a focus of overall development efforts.

Advanced Manufacturing Target

Private Employment Growth, Wage Growth, and Location Quotients, Fourth Quarter 2009

4- Digit Code	Description				Employment		Average Annual Wage	
		4Q09 Emp	4Q09 LQ	4Q09 AAW	MO %Change, 04-09	US %Change, 04-09	MO %Change, 04-09	US %Change, 04-09
	Total across Sectors	2,157,290	-	\$43,128	-3.77%	15.30%	-3.23%	15.20%
Automotive								
3359	Other Electrical Equipment and Component Manufacturing	5,047	2.13	\$40,902	-18.53%	-14.80%	13.35%	14.74%
3361	Motor Vehicle Manufacturing	-	-	-	-	-40.01%	61.17%	6.48%
3362	Motor Vehicle Body and Trailer Manufacturing	2,770	1.31	\$40,547	-29.09%	-37.76%	8.40%	15.61%
3363	Motor Vehicle Parts Manufacturing	7,770	0.94	\$38,885	-54.37%	-40.88%	6.65%	1.65%
Aerospace and Defense								
3259	Other Chemical Product and Preparation Manufacturing	1,632	0.95	\$48,297	-11.05%	-19.84%	20.87%	7.77%
3323	Architectural and Structural Metals Manufacturing	6,748	1.02	\$43,753	-19.79%	-16.25%	14.80%	17.46%
3329	Other Fabricated Metal Product Manufacturing	9,433	1.88	\$55,892	-2.95%	-12.29%	21.80%	13.68%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%
3323	Architectural and Structural Metals Manufacturing	6,748	1.02	\$43,753	-19.79%	-16.25%	14.80%	17.46%
3329	Other Fabricated Metal Product Manufacturing	9,433	1.88	\$55,892	-2.95%	-12.29%	21.80%	13.68%
3359	Other Electrical Equipment and Component Manufacturing	5,047	2.13	\$40,902	-18.53%	-14.80%	13.35%	14.74%
3364	Aerospace Product and Parts Manufacturing	14,928	1.52	\$87,380	-7.68%	8.03%	14.19%	16.03%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%

Source: MERIC via the U.S. Bureau of Labor Statistics

Clean Energy

- The proposed Clean Energy target expands the definition of the current DED Energy target and includes two niches: Generation and Transmission and Technology and Components.
 - The *Generation and Transmission* niche includes the generation and distribution of clean energy, including hydroelectric power, fossil fuel electric power, and nuclear power.
 - The *Technology* niche includes the design, development and manufacture of new technologies that support the growth and promotion of sustainable energy. A major component of this niche is research and development, which contributes new ways to produce, conserve, transmit and store energy.
- Key “green-tech” components of this niche include Alternative Fuels, Wind Energy, Solar Energy, and Clean Coal.
 - While Missouri lags behind other states in Wind Energy, it is nevertheless a growing opportunity. In 2000, Missouri had no wind power capacity, according to the U.S. Department of Energy. As of July 2010, Missouri has 457 megawatts of wind power program capacity, making it the 17th ranked state in the nation in existing capacity.
- Missouri has an important opportunity to expand its clean energy efforts, including clean coal and alternative fuels, leveraging its geologic and agricultural assets, top utilities and public/private research capacity.
- In 2008, University of Missouri launched the Center for Sustainable Energy to assist in catapulting Missouri to the forefront of the national search for energy sustainability. The Center is a joint venture of the University’s College of Engineering and College of Agriculture, Food, and Natural Resources.
- Another asset, the Missouri Energy Initiative, is a resource network of colleges and universities, governmental entities, private businesses, including manufacturers, and utility companies. Its mission is to “develop interactive and collaborative public/private sector partnerships” and to “engage Missourians in energy education, science, technology, policy, and activities.” This organization can be leveraged to further this target and solidify Missouri as a leader in clean energy.

Clean Energy Target Private Employment Growth, Wage Growth, and Location Quotients, Fourth Quarter 2009

4- Digit Code	Description				Employment		Average Annual Wage	
		4Q09 Emp	4Q09 LQ	4Q09 AAW	MO %Change, 04-09	US %Change, 04-09	MO %Change, 04-09	US %Change, 04-09
	Total across Sectors	2,157,290	-	\$43,128	-3.77%	15.30%	-3.23%	15.20%
Generation and Transmission								
2211	Electric Power Generation, Transmission and Distribution	10,072	1.00	\$75,414	6.90%	0.09%	22.91%	15.87%
2212	Natural Gas Distribution	3,132	1.33	\$69,955	-2.56%	-1.00%	6.14%	22.32%
2371	Utility System Construction	7,259	0.92	\$60,421	0.52%	-0.06%	33.17%	30.01%
Technology and Components								
3112	Grain and Oilseed Milling	2,255	1.88	\$45,851	16.15%	-3.48%	9.28%	11.58%
3241	Petroleum and Coal Products Manufacturing	1,348	0.58	\$60,471	-7.03%	0.37%	24.29%	22.87%
3251	Basic Chemical Manufacturing	3,023	1.05	\$66,029	5.66%	-7.27%	21.15%	9.22%
3252	Resin, Synthetic Rubber, & Artificial Synthetic Fibers & Filaments Mfg	795	0.44	\$60,827	-3.17%	-15.44%	6.86%	11.60%
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Mfg	1,686	2.30	\$65,863	-11.00%	-11.97%	3.37%	15.72%
3261	Plastics Product Manufacturing	11,548	1.15	\$39,960	-20.12%	-21.88%	8.40%	13.29%
3272	Glass and Glass Product Manufacturing	893	0.55	\$47,014	-19.23%	-27.93%	17.98%	9.85%
3315	Foundries	2,161	0.99	\$44,822	-56.17%	-35.95%	20.83%	4.03%
3323	Architectural and Structural Metals Manufacturing	6,748	1.02	\$43,753	-19.79%	-16.25%	14.80%	17.46%
3329	Other Fabricated Metal Product Manufacturing	9,433	1.88	\$55,892	-2.95%	-12.29%	21.80%	13.68%
3332	Industrial Machinery Manufacturing	1,492	0.76	\$46,599	-30.38%	-19.42%	7.05%	6.59%
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	8,257	3.26	\$36,573	-9.23%	-18.13%	7.19%	10.08%
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	1,962	1.08	\$36,980	-34.22%	-5.57%	18.21%	13.56%
3344	Semiconductor and Other Electronic Component Manufacturing	3,089	0.42	\$54,567	-31.70%	-19.48%	15.55%	11.91%
3345	Navigational, Measuring, Electromedical, & Control Instruments Mfg	1,681	0.20	\$50,331	-5.51%	-5.50%	-3.90%	16.01%
3353	Electrical Equipment Manufacturing	5,659	2.03	\$53,908	-23.12%	-10.66%	34.20%	18.34%
3353	Electrical Equipment Manufacturing	5,659	2.03	\$53,908	-23.12%	-10.66%	34.20%	18.34%
3359	Other Electrical Equipment and Component Manufacturing	5,047	2.13	\$40,902	-18.53%	-14.80%	13.35%	14.74%
4247	Petroleum and Petroleum Products Merchant Wholesalers	2,254	1.16	\$45,992	-5.19%	-4.97%	30.29%	28.21%
5413	Architectural, Engineering, and Related Services	22,654	0.82	\$69,954	11.56%	1.39%	21.36%	22.46%
5416	Management, Scientific, and Technical Consulting Services	9,684	0.48	\$67,265	2.44%	21.19%	25.40%	16.84%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%
8111	Automotive Repair and Maintenance	18,018	1.11	\$30,333	-8.58%	-9.95%	10.13%	13.30%
8112	Electronic and Precision Equipment Repair and Maintenance	1,663	0.84	\$50,687	-16.22%	-4.49%	19.44%	13.27%
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance	2,798	0.79	\$42,801	14.92%	7.00%	22.40%	22.81%
9241	Administration of Environmental Quality Programs	5,312	0.82	\$38,434	-8.02%	-0.83%	19.64%	18.09%
9261	Administration of Economic Program	12,995	1.00	\$53,066	-0.29%	10.51%	18.85%	16.31%

Source: MERIC via the U.S. Bureau of Labor Statistics

Note: The BLS and its partners (including MERIC) are working to include NAICS codes which pull out "clean and green" activities from existing NAICS classifications. The sectors included in this list have Clean Energy components but are not, as a whole "clean and green."

Biosciences

- Combining the Missouri Department of Economic Development's Agribusiness and Life Sciences targets, the proposed Biosciences target encompasses three niches: Plant, Animal, and Medical.
 - The *Plant* niche leverages the state's agriculture base in the value-added creation of products such as biochemicals and other ecotechnologies that enhance the existing target segment of pharmaceutical and chemical manufacturing.
 - The *Animal* niche includes the humane use of animals for the production of safe food, fiber, and other biological uses. Immunology, biomedicine, and cellular biology are other useful applications.
 - The *Medical* niche encompasses the manufacture of pharmaceuticals, medical research and laboratories, and the manufacture of medical instruments and lab equipment.
- Although some subsectors included in the previous Agribusiness target have been eliminated, agriculture remains a vital part of the state's economy. As such, promising growth sectors are incorporated in this and other targets.
- Missouri's capacity for research supports this target. Missouri is home to companies such as Pfizer, a pharmaceutical manufacturer; Monsanto, an agricultural chemical product manufacturer; Sigma-Aldrich Corporation, a biological product manufacturer; Saint Luke's Regional Labs, a medical laboratory; and Bausch & Lomb Surgical; a medical equipment manufacturer.
- Missouri has already made significant investments in Biosciences. One such investment is the funding of a new Missouri Plant Science Center, a plant science research center with manufacturing capabilities and a joint venture of the Missouri Technology Corporation and the University of Missouri system. The state has provided \$7.5 million in funding and incentives for the center.
- Other assets of the state are Kansas City's Animal Health Corridor and its reputation as a global leader in animal health and nutrition research, innovation, business function, and production. At the core of this Corridor is the cutting-edge research being conducted at the institutions

considered stakeholders of the Kansas City Area Life Sciences Institute, including:

- University of Missouri – Columbia, which has a Life Sciences Center and a Swine Research Center,
- Stowers Institute for Medical Research, which is an international leader in basic science and comparative medicine research and has a \$2 billion endowment, and
- Midwest Research Institute, which boasts over 60 years of science research and development experience and specific expertise in various animal health care services, such as pharmaceutical safety.

Biosciences Target

Private Employment Growth, Wage Growth, and Location Quotients, Fourth Quarter 2009

4- Digit Code	Description				Employment		Average Annual Wage	
					MO %Change, 04-09	US %Change, 04-09	MO %Change, 04-09	US %Change, 04-09
	Total across Sectors	2,157,290	-	\$43,128	-3.77%	15.30%	-3.23%	15.20%
Plant								
1111	Oilseed and Grain Farming	1,859	2.21	\$29,483	39.57%	33.23%	19.57%	23.40%
3112	Grain and Oilseed Milling	2,255	1.88	\$45,851	16.15%	-3.48%	9.28%	11.58%
3251	Basic Chemical Manufacturing	3,023	1.05	\$66,029	5.66%	-7.27%	21.15%	9.22%
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Mfg	1,686	2.30	\$65,863	-11.00%	-11.97%	3.37%	15.72%
3254	Pharmaceutical and Medicine Manufacturing	4,565	0.80	\$73,637	-12.76%	-1.75%	15.93%	24.37%
4245	Farm Product Raw Material Merchant Wholesalers	2,502	1.61	\$48,453	-10.61%	1.73%	70.08%	37.48%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%
Animal								
1122	Hog and Pig Farming	1,703	2.94	\$28,663	-14.61%	19.75%	11.72%	17.36%
1152	Support Activities for Animal Production	533	0.95	\$26,428	-5.50%	7.92%	4.15%	21.26%
3111	Animal Food Manufacturing	3,500	3.36	\$77,559	8.98%	5.42%	31.31%	13.53%
3254	Pharmaceutical and Medicine Manufacturing	4,565	0.80	\$73,637	-12.76%	-1.75%	15.93%	24.37%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%
5419	Other Professional, Scientific, and Technical Services	11,606	0.98	\$34,245	6.21%	9.93%	26.06%	26.79%
Medical								
3254	Pharmaceutical and Medicine Manufacturing	4,565	0.80	\$73,637	-12.76%	-1.75%	15.93%	24.37%
3391	Medical Equipment and Supplies Manufacturing	4,769	0.78	\$52,814	5.51%	-0.21%	30.95%	13.23%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%
6215	Medical and Diagnostic Laboratories	3,789	0.85	\$50,457	2.33%	14.35%	1.88%	14.04%
6221	General Medical and Surgical Hospitals	131,488	1.19	\$46,844	8.16%	7.95%	21.76%	23.60%

Source: MERIC via the U.S. Bureau of Labor Statistics

Information Technology

- The Information Technology target remains an important one for Missouri and encompasses two niches: Software and Systems Design and Electronics.
 - *Software and Systems Design* encompasses software design and publishing; data processing and hosting; computer systems design, including hardware, software, and communication integration; and research and development. Data centers would fall under this category and have a potentially strong relationship with the Corporate Services target.
 - *Electronics* includes the design and manufacture of all equipment supporting a broad range of IT services and functions, while also having strong applications to other of the state's target sectors. Advanced Manufacturing and Clean Energy are two targets that have direct integration opportunities with this niche.
- Missouri telecommunications infrastructure consists of the National LambdaRail (NLR), a 12,000 mile, high-speed national network that supports some of the nation's most demanding research projects; Internet2, which is an advanced network consortia based in Kansas City that connects over 60,000 educational, research, government, and community institutions; and NLR and Internet2 Telepresence, which is a partnership between the two aforementioned networks that enables face-to-face meetings and collaboration between any of the research and educational institutions on either network.
- Major companies in the state include AT&T, 3M, and Northrop Grumman Interconnect.
- One important application of Information Technology is Health IT and the digitization of health records. Of \$267 million provided through the American Recovery and Reinvestment Act of 2009, \$6.8 million was awarded to University of Missouri to establish the Missouri Health Information Technology Assistance Center. The HIT Assistance Center will assist Missouri primary care providers in instituting electronic health records best suited to their practices will train them to use the technology to improve quality, safety and efficiency in patient care.

Information Technology Target Private Employment Growth, Wage Growth, and Location Quotients, Fourth Quarter 2009

4- Digit Code	Description				Employment		Average Annual Wage	
					MO %Change, 04-09	US %Change, 04-09	MO %Change, 04-09	US %Change, 04-09
	Total across Sectors	2,157,290	-	\$43,128	-3.77%	15.30%	-3.23%	15.20%
Software and Systems Design								
5112	Software Publishers	2,792	0.55	\$77,476	16.68%	6.98%	1.05%	21.14%
5415	Computer Systems Design and Related Services	21,931	0.76	\$79,044	8.82%	20.92%	19.19%	14.56%
5324	Commercial & Industrial Machinery & Equipment Rental and Leasing	1,942	0.86	\$47,362	5.96%	4.52%	-1.86%	16.40%
5182	Data Processing, Hosting, and Related Services	10,769	2.15	\$86,033	-1.93%	-6.61%	46.45%	23.20%
5417	Scientific Research and Development Services	10,094	0.79	\$109,573	29.03%	7.68%	14.08%	22.20%
Electronics								
3313	Alumina and Aluminum Production and Processing	1,756	1.64	\$54,731	-19.70%	-28.11%	18.60%	11.50%
3332	Industrial Machinery Manufacturing	1,492	0.76	\$46,599	-30.38%	-19.42%	7.05%	6.59%
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	8,257	3.26	\$36,573	-9.23%	-18.13%	7.19%	10.08%
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	1,962	1.08	\$36,980	-34.22%	-5.57%	18.21%	13.56%
3339	Other General Purpose Machinery Manufacturing	4,562	1.01	\$48,521	-22.16%	-15.49%	12.19%	12.28%
3341	Computer and Peripheral Equipment Manufacturing	73	0.02	\$53,075	-71.15%	-21.69%	54.07%	20.27%
3342	Communications Equipment Manufacturing	730	0.31	\$53,178	-23.42%	-19.49%	1.63%	16.02%
3344	Semiconductor and Other Electronic Component Manufacturing	3,089	0.42	\$54,567	-31.70%	-19.48%	15.55%	11.91%
3345	Navigational, Measuring, Electromedical, and Control Instruments Mfg	1,681	0.20	\$50,331	-5.51%	-5.50%	-3.90%	16.01%
3346	Manufacturing and Reproducing Magnetic and Optical Media	222	0.41	\$70,679	-4.85%	-44.58%	-8.55%	17.81%
3353	Electrical Equipment Manufacturing	5,659	2.03	\$53,908	-23.12%	-10.66%	34.20%	18.34%
3359	Other Electrical Equipment and Component Manufacturing	5,047	2.13	\$40,902	-18.53%	-14.80%	13.35%	14.74%
3369	Other Transportation Equipment Manufacturing	822	1.18	\$49,428	-26.26%	-9.79%	1.06%	8.32%
4431	Electronics and Appliance Stores	9,358	0.91	\$32,320	-9.13%	-9.29%	21.19%	11.72%
5414	Specialized Design Services	1,819	0.74	\$51,450	6.73%	-3.69%	19.72%	14.06%
5416	Management, Scientific, and Technical Consulting Services	9,684	0.48	\$67,265	2.44%	21.19%	25.40%	16.84%
8112	Electronic and Precision Equipment Repair and Maintenance	1,663	0.84	\$50,687	-16.22%	-4.49%	19.44%	13.27%

Source: MERIC via the U.S. Bureau of Labor Statistics

Corporate Services

- Expanding the previous Finance target, the proposed Corporate Operations target encompasses two niches: Business Services and Customer Care.
 - The *Business Services* niche includes several subsectors: finance and insurance, accounting, legal services, advertising and public relations, and business support. Business support includes administrative work, human resources functions, marketing, sales, and many other functions companies need to maintain healthy operation.
 - The *Customer Care* niche includes customer-care centers, inbound call centers and other back office operations. These opportunities represent value-added services above and beyond the “typical” call center position and therefore pay higher average wages. Customer-care staff require higher-level skills to manage customer complaints, concerns and issues and can frequently “up-sell” the customer to new products and services.
- By focusing on these niches, the State of Missouri will create opportunities for talented local graduates and young professionals in areas such as consulting, finance, insurance, marketing, and legal services and provide not only quality entry-level positions, but also “C-level” opportunities to retain and attract top talent as well as an added emphasis on growing and retaining professional services small businesses.
- Missouri has a significant finance and insurance business sector presence. In fact, Missouri is the only state with two Federal Reserve Banks, in Kansas City and in St. Louis. In addition, many financial headquarters as well as other sector central offices, including those of other targets, are located in the state, creating a viable target cluster. This year, Missouri ranked 16th in the nation in the number of Fortune 500 company headquarters.
- Many of this target’s subsectors experienced employment growth since fourth quarter 2004, despite the Great Recession.

Corporate Services Target
Private Employment Growth, Wage Growth, and Location Quotients, Fourth Quarter 2009

4- Digit Code	Description				Employment		Average Annual Wage	
		4Q09 Emp	4Q09 LQ	4Q09 AAW	MO %Change, 04-09	US %Change, 04-09	MO %Change, 04-09	US %Change, 04-09
	Total across Sectors	2,157,290	-	\$43,128	-3.77%	15.30%	-3.23%	15.20%
Business Services								
5211	Monetary Authorities-Central Bank	-	-	-	-	0.95%	-	41.80%
5221	Depository Credit Intermediation	41,028	1.18	\$44,053	2.07%	-2.21%	16.11%	13.32%
5222	Nondepository Credit Intermediation	13,155	1.11	\$54,332	-20.77%	-23.88%	4.61%	6.81%
5231	Securities & Commodity Contracts Intermediation & Broker	11,186	1.19	\$92,824	57.70%	-5.00%	4.62%	5.33%
5239	Other Financial Investment Activities	5,301	0.79	-	34.31%	18.73%	-	23.86%
5241	Insurance Carriers	23,334	0.94	\$60,679	-4.07%	-4.51%	15.03%	14.88%
5242	Agencies, Brokerages, & Other Insurance Related Activities	19,431	1.09	\$55,855	2.01%	1.41%	18.68%	14.11%
5251	Insurance and Employee Benefit Funds	1,330	1.22	\$67,973	24.95%	11.37%	19.75%	7.48%
5411	Legal Services	20,746	0.91	\$67,783	-2.15%	-3.95%	17.33%	19.38%
5412	Accounting, Tax Preparation, Bookkeeping, & Payroll Svcs	17,159	0.96	\$48,286	-8.47%	7.81%	16.93%	19.09%
5418	Advertising, Public Relations, and Related Services	7,733	0.93	\$56,155	-13.87%	-6.65%	14.44%	15.62%
Customer Care								
5614	Business Support Services	24,860	1.51	\$31,710	47.47%	7.65%	21.13%	10.42%
5415	Computer Systems Design and Related Services	21,931	0.76	\$79,044	8.82%	20.92%	19.19%	14.56%

Source: MERIC via the U.S. Bureau of Labor Statistics

Note: Many customer care centers are classified within the NAICS codes of their home business and thus make them difficult to track.

Transportation and Logistics

- This target reflects the current state cluster but adds a focus on three niches: Freight Hauling, which includes various means of transportation; Warehousing; and Wholesalers, which encompasses wholesalers and brokers of the merchandise central to the supply chain.
 - The *Freight Hauling* niche includes a wide variety of commodities which are palletized and transported in a container. These businesses provide a combination of supply chain management activities including local pickup and delivery, sorting, and line-haul.
 - The *Warehousing* niche includes establishments that operate merchandise warehousing and storage facilities. While some firms provide specialized facilities, such as those that are refrigerated or accommodate farm products, most firms in this area provide general storage for boxes, barrels, drums, equipment, and pallets. This niche also includes firms that specialize in logistics management, providing assistance to businesses in manufacturing operations improvements, productivity improvement, production planning, quality assurance, inventory management, distribution networks, warehouse use and operations, and materials management.
 - The *Wholesalers* niche includes firms engaged in the wholesale trade of both durable and non-durable goods. Non-durable goods are new or used products with less than a three-year life span, such items would include clothing, personal products, and food. Durable goods include items such as motor vehicles, furniture, construction materials, sporting goods, and recyclable materials.
- Missouri has sizable existing employment in this target, with major employers such as Wal-Mart, Yellow Freight, United Parcel Service, Federal Express, and DHL Express.
- Key growth strategies for this target will leverage the Kansas City region's successful SmartPort model of multi-modal shipping integration as well as Greater St. Louis' efforts to become a cargo hub for China.

Transportation and Logistics Target Private Employment Growth, Wage Growth, and Location Quotients, Fourth Quarter 2009

4- Digit Code	Description				Employment		Average Annual Wage	
		4Q09 Emp	4Q09 LQ	4Q09 AAW	MO %Change, 04-09	US %Change, 04-09	MO %Change, 04-09	US %Change, 04-09
	Total across Sectors	2,157,290	-	\$43,128	-3.77%	15.30%	-3.23%	15.20%
Freight Hauling								
4811	Scheduled Air Transportation	4,476	0.54	\$55,797	-28.62%	-12.08%	2.60%	2.22%
4812	Nonscheduled Air Transportation	262	0.30	\$64,507	-45.45%	-2.83%	81.11%	28.11%
4821	Rail Transportation	24	2.08	\$29,575	-	27.61%	-	28.00%
4832	Inland Water Transportation	841	1.70	\$69,418	76.38%	16.00%	48.88%	31.50%
4841	General Freight Trucking	24,461	1.39	\$42,182	-14.16%	-10.54%	7.95%	7.91%
4842	Specialized Freight Trucking	13,102	1.72	\$35,305	3.15%	-7.84%	11.20%	13.35%
4881	Support Activities for Air Transportation	3,669	0.90	\$40,432	-5.45%	-0.62%	-1.00%	5.17%
4882	Support Activities for Rail Transportation	728	1.64	\$44,263	10.25%	3.63%	26.29%	20.03%
4883	Support Activities for Water Transportation	536	0.28	\$50,604	23.01%	-9.03%	25.48%	14.43%
4884	Support Activities for Road Transportation	1,420	0.69	\$28,146	17.30%	0.74%	12.64%	11.78%
4885	Freight Transportation Arrangement	3,093	0.91	\$44,540	4.63%	-4.00%	12.45%	14.18%
Warehousing								
3219	Other Wood Product Manufacturing	4,448	1.10	\$29,192	-30.10%	-37.11%	12.80%	6.45%
3261	Plastics Product Manufacturing	11,548	1.15	\$39,960	-20.12%	-21.88%	8.40%	13.29%
3324	Boiler, Tank, and Shipping Container Manufacturing	2,087	1.24	\$53,701	-11.92%	-8.57%	12.01%	17.14%
4931	Warehousing and Storage	12,481	0.96	\$39,161	-6.21%	10.36%	11.34%	12.69%
5416	Management, Scientific, and Technical Consulting Services	9,684	0.48	\$67,265	2.44%	21.19%	25.40%	16.84%
Wholesalers								
4231	Motor Vehicle & Motor Vehicle Parts & Supplies Merchant Wholesalers	8,971	1.44	\$41,243	-12.48%	-9.08%	12.30%	8.61%
4233	Lumber and Other Construction Materials Merchant Wholesalers	4,055	1.04	\$48,428	-18.07%	-21.86%	7.48%	6.41%
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	2,322	1.04	\$58,475	-11.06%	-9.46%	15.41%	8.78%
4236	Electrical and Electronic Goods Merchant Wholesalers	6,151	0.97	\$57,111	0.73%	-8.90%	10.61%	10.86%
4237	Hardware & Plumbing/Heating Equip. & Supplies Merchant Wholesalers	4,671	1.04	\$50,846	-6.27%	-6.75%	12.31%	12.76%
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	14,264	1.15	\$53,566	-3.94%	-6.74%	11.61%	14.49%
4241	Paper and Paper Product Merchant Wholesalers	3,922	1.52	\$54,373	-12.75%	-15.71%	9.59%	14.39%
4244	Grocery and Related Product Merchant Wholesalers	12,000	0.83	\$47,755	-3.95%	3.15%	10.09%	13.72%
4245	Farm Product Raw Material Merchant Wholesalers	2,502	1.61	\$48,453	-10.61%	1.73%	70.08%	37.48%
4246	Chemical and Allied Products Merchant Wholesalers	2,827	1.15	\$59,681	4.67%	-6.34%	11.37%	14.95%
4247	Petroleum and Petroleum Products Merchant Wholesalers	2,254	1.16	\$45,992	-5.19%	-4.97%	30.29%	28.21%
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	3,519	1.07	\$50,998	10.85%	13.70%	11.63%	10.19%
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	6,919	1.05	\$39,987	-11.41%	-8.67%	16.11%	15.22%
4251	Wholesale Electronic Markets and Agents and Brokers	23,577	1.45	\$75,716	26.88%	11.46%	26.50%	22.22%

Source: MERIC via the U.S. Bureau of Labor Statistics